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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/529,762	04/18/2000	CHARLES W RITTERSHAUS	TCS-420.1PUS	3426

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LEON R. YANKWICH
YANKWICH & ASSOCIATES
201 BROADWAY
CAMBRIDGE, MA 02139

EXAMINER

HUYNH, PHUONG N

ART UNIT PAPER NUMBER

1644

DATE MAILED: 05/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/529,762	RITTERSHAUS ET AL.	
	Examiner	Art Unit	
	Phuong Huynh	1644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE Three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 40-48,51 and 52 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 40-48,51 and 52 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. Claims 40-48 and 51-52 are pending.
2. In view of the decision of the Board of Appeals and Interferences mailed 3/18/05, PROSECUTION IS HEREBY REOPENED. A New Office Action is set forth below.
3. The Board of Patent Appeals and Interferences affirmed the following rejection of claims 40-45, 47, 51, and 52 under 35 U.S.C § 102(a) as anticipated by Kwoh (WO 96/39168 publication).
4. Claims 40-44, 45, 47 and 51-52 stand rejected under 35 U.S.C. 102(a) as being anticipated by the WO 96/39168 publication (Dec 12, 1996, PTO 892) as set forth in the Examiner's answer mailed 1/2/04 and affirmed by the Board of Appeals and Interference mailed 3/18/05.
5. The following rejections are based on the recommendation of the Board of Patent Appeals and Interferences' in the Board decision mailed 3/18/05.
6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office Action:
A person shall be entitled to a patent unless –
(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
7. Claims 40-48 and 51-52 are rejected under 35 U.S.C. 102(a) as being anticipated by the WO 96/39168 publication (of record, Dec 12, 1996, PTO 892).

The 96/39168 publication teaches a method of modulating the endogenous active cholesteryl ester transfer protein (CETP) in a mammal such as an individual exhibiting or at risk of exhibiting low serum levels of HDL cholesterol (good cholesterol) (see page 5, lines 1-10, in particular). The examiner considers that the reference individual is a human patient (claims 46 and 48). The reference method comprises administering to said individual a full-length human CETP of SEQ ID NO: 1 of WO 96/39168, or a taxoid conjugated human CETP peptide, which are non-endogenous CETP, in an amount effective to stimulate an immune response such as anti-CETP antibody wherein said antibody inhibits the function of CETP (See abstract, in particular). The reference method further comprises administered to the mammal in combination with an

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adjuvant such as CFA (Complete Freund's Adjuvant) or IFA (Incomplete Freund's adjuvant) wherein the reference adjuvant is effective to non-specifically stimulate the immune response of the mammal such as production of antibody (See abstract, page 7, line 29, page 8, lines 1-2, in particular). The WO96/39168 further teaches individual suffering from dietary or genetic hypercholesterolemia has elevated CETP activity; increased levels of CETP activity result in lowered levels of HDL (see page 1, line 28-34, in particular). Because HDL has the beneficial effect in preventing atherosclerosis (see page 2, lines 19-20, in particular), the reference method is useful for treating individuals exhibiting or at risk of exhibiting low serum levels of HDL cholesterol (good cholesterol) (see page 5, lines 1-10, in particular). Because the reference method teaches the use of the same CETP such as xenogeneic CETP as that of the claimed method, the reference method inherently is capable of reducing CETP activity below 20% of that of untreated human individual, achieving a level of essentially 0 μ g of CETP per millimeter of blood of the mammal. The reference also inherently achieves a lipid profile wherein greater than about 90% or about 100% of the total cholesterol in the blood of the mammal is HDL-cholesterol while less than 10% of the total cholesterol is LDL-cholesterol or essentially none of the total cholesterol in the blood of the mammal is LDL-cholesterol.

While the reference is silent that the reference method of administering to the mammal a whole non-endogenous CETP has the property of that recited in claims 41-43 and 45, the antibody directed against said non-endogenous CETP in the mammal and the functional properties of the reference antibody are the inherent property of the reference method. Therefore the claimed method appears to be the same as the prior art method. Since the Patent Office does not have the facilities for examining and comparing the method of the instant invention to those of the prior art, the burden is on applicant to show that the prior art method is different from the claimed method. See *In re Best*, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977). Thus, the reference teachings anticipate the claimed invention.

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 103(a) that form the basis for the rejections under this section made in this Office Action:

A person shall be entitled to a patent unless:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. This application currently names joint inventors. In considering Patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
10. Claims 40-48 and 51-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 96/39168 publication (of record, Dec 12, 1996, PTO 892) in view of Saso et al, *Pistol Histopathol* 7(3): 315-20, July 1992; abstract only; PTO 892) and Tall et al (*J Clin Invest* 79: 1217-1225, April 1987; PTO 892).

The 96/39168 publication teaches a method of modulating the endogenous active cholesteryl ester transfer protein (CETP) in a mammal such as a rabbit by administering to said rabbit a full-length human CETP of SEQ ID NO: 1 of WO 96/39168, or a taxoid conjugated human CETP peptide, which are non-endogenous CETP, in an amount effective to stimulate an immune response such as anti-CETP antibody wherein said antibody inhibits the function of CETP such as reducing the CETP activity below 20% of that of the untreated mammal (See abstract, Fig 2, of WO 96/39168, in particular). The reference method further comprises administered to the mammal in combination with an adjuvant such as CFA (Complete Freund's Adjuvant) or IFA (Incomplete Freund's adjuvant) wherein the reference adjuvant is effective to non-specifically stimulate the immune response of the mammal such as production of antibody (See page 7, line 29, page 8, lines 1-2, in particular). The reference method decreases LDL-cholesterol to less than 16% of the total cholesterol in the serum (blood plasma), which is about 10% (See Table 1, page 11, in particular). The term "about" expands the claimed 10% of the total cholesterol to read on the reference 16%. Claim 47 is included in this rejection because the reference teaches xenogeneic CETP which is a human CETP, in addition to a mammalianized non-endogenous CETP (See SEQ ID NO: 3 of WO 96/39168) where the reference SEQ ID NO: 3 is common to both human and rabbit CETP, which makes the human CETP more similar to rabbit and vice versa and the epitope is recognized by anti-CETP monoclonal antibody to which it is neutralized (See page 7, lines 20-22, in particular). The WO96/39168 further teaches individual suffering from dietary or genetic hypercholesterolemia has elevated CETP activity; increased

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levels of CETP activity result in lowered levels of HDL (see page 1, line 28-34, in particular). Because HDL has the beneficial effect in preventing atherosclerosis (see page 2, lines 19-20, in particular), the reference method is useful for treating individuals exhibiting or at risk of exhibiting low serum levels of HDL cholesterol (good cholesterol) (see page 5, lines 1-10, in particular).

The invention in claims 46 and 48 differs from the teachings of the reference only in that the method of modulating the level of endogenous cholesteryl ester transfer protein (CETP) activity in a mammal wherein the mammal is a human instead of rabbit.

Saso et al teach the rabbit is a useful model for human atherosclerosis (see abstract, in particular). The advantage of the rabbit model is that it can be produced in a short period and having similar biochemical and pathological characteristics with those in human atherosclerosis (see abstract, in particular).

Tall et al teach increased CETP mediated cholesteryl ester transfer may serve to link low levels of HDL with accumulation of atherogenic VLDL using rabbit as a model (see entire document, page 1224, col. 1, last paragraph, page 1217, col. 2, Methods, in particular).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the rabbit for the subject such as human who suffers from hypercholesterolemia with elevated CETP and low HDL for a method of modulating the level of endogenous cholesteryl ester transfer protein (CETP) activity in human by administering to the human a whole non-endogenous CETP as taught by the WO 96/39168 publication.

One having ordinary skill in the art would have been motivated to do this because individual suffering from dietary or genetic hypercholesterolemia has elevated CETP activity; increased levels of CETP activity result in lowered levels of HDL (see page 1, line 28-34, in particular) and administering CETP is useful for treating individuals exhibiting or at risk of exhibiting low serum levels of HDL cholesterol (good cholesterol) as taught by the WO 96/39168 (see page 5, lines 1-10, in particular). It is obvious to one ordinary skill in the art at the time the invention was made that the reference method is intended to modulating the level of endogenous cholesteryl ester transfer protein in human since the WO 96/39168 publication teaches the reference method is useful for treating individuals exhibiting or at risk of exhibiting low serum levels of HDL cholesterol (good cholesterol) (see page 5, lines 1-10, in particular) and the reference rabbit is a model for atherosclerosis in human as taught by Saso et al and Tall et al. The recitation of administering to human is an obvious variation of the references teachings.

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11. No claim is allowed.
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Huynh "NEON" whose telephone number is (571) 272-0846. The examiner can normally be reached Monday through Friday from 9:00 am to 5:30 p.m. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (571) 272-0841. The IFW official Fax number is (571) 273-8300.
13. Any information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuong N. Huynh, Ph.D.

Patent Examiner

Technology Center 1600

May 16, 2005


CHRISTINA CHAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600